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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

to make Indiana a cleaner, healthier place to live.

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MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**United Technologies Electronic Controls, Inc.
3650 West 200 North
Huntington, Indiana 46750**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 069-16982-00030

Issued by: Original signed by
Paul Dubenetzky, Branch Chief
Office of Air Quality

Issuance Date: March 17, 2004

Expiration Date: March 17, 2009

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary electric circuit board manufacturing plant.

Authorized Individual:	Plant Manager
Source Address:	3650 West 200 North, Huntington, Indiana 46750
Mailing Address:	3650 West 200 North, Huntington, Indiana 46750
General Source Phone:	(260) 358-0888
SIC Code:	3822
County Location:	Huntington
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Seven (7) wave solder machines, including the following:
- (1) One (1) wave solder machines with Line A, identified as ES03, constructed in 1999, with a maximum throughput rate of 250 boards per hour, and exhausting through stacks #12.
 - (2) One (1) wave solder machines with Line B, identified as ES02, constructed in 1998, with a maximum throughput rate of 250 boards per hour, and exhausting through stacks #51.
 - (3) One (1) wave solder machine with Line C, identified as ES05, constructed in 2002, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #14.
 - (4) One (1) wave solder machine with Line D, identified as ES01, constructed in 2003, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #15.
 - (5) One (1) wave solder machine with Line E, identified as ES04, constructed in 2001, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #16.
 - (6) One (1) wave solder machine with Line F, identified as HS03, constructed in 1995, with a maximum throughput rate of 325 boards per hour, and exhausting through stack #36.

- (7) One (1) wave solder machine with Line G, identified as HS05, constructed in 1999, with a maximum throughput rate of 325 boards per hour, and exhausting through stack #4.
- (b) Fifteen (15) coating operations, including the following:
 - (1) Two (2) conformal coaters with Line A, identified as NS10 and PS02, constructed in 1999 and 2003, with a total maximum throughput rate of 250 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE04), controlled by dry filters, and exhausting through stack #48.
 - (2) Two (2) conformal coaters with Line B, identified as NS08 and PS01, constructed in 1999 and 2003, with a total maximum throughput rate of 250 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE03), controlled by dry filters, and exhausting through stack #6.
 - (3) Two (2) conformal coaters with Line C, identified as NS05 and NS06, both constructed in 1999, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE08), controlled by dry filters, and exhausting through stack #52.
 - (4) Two (2) conformal coaters with Line D, identified as NS01 and NS02, both constructed in 1995, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE05), controlled by dry filters, and exhausting through stack #20.
 - (5) Two (2) conformal coaters with Line E, identified as NS03 and NS04, constructed in 1995 and 1998, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE09), controlled by dry filters, and exhausting through stack #53.
 - (6) Two(2) conformal coaters with Line F, identified as NS07 and NS09, both constructed in 1999, with a total maximum throughput rate of 325 boards per hour, using airless spray equipment, equipped with an electric cure oven (NO03), controlled by dry filters, and exhausting through stack #47.
 - (7) Two (2) adhesive dispense operations with Line A, identified as FU02 and FU33, both constructed after 1989.
 - (8) One (1) RTV applicator with Line A, identified as PS03, constructed in 2003.
- (c) Seven (7) printing operations, constructed after 1995, including the following:
 - (1) One (1) ink jet printing operation with Line A, identified as BM08, with a maximum throughput rate of 325 boards per hour.
 - (2) Two (2) screen printing operations with Line A, identified as DE02 and DE03, with a total maximum throughput rate of 325 boards per hour.
 - (3) One (1) ink jet printing operation with Line D, identified as BM06, with a maximum throughput rate of 450 boards per hour.
 - (4) One (1) ink jet printing operation with Line E, identified as BM05, with a maximum throughput rate of 325 boards per hour.

- (5) One (1) ink jet printing operation with Line F, identified as BM03, with a maximum throughput rate of 325 boards per hour.
 - (6) One (1) screen printing operation with Line F, identified as DE01, with a maximum throughput rate of 325 boards per hour.
- (d) Two (2) natural gas fired boilers, constructed in 1989, each with a maximum heat input rate of 2.4 MMBtu/hr.
- (e) Operations using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs:
 - (1) One (1) stencil cleaner with Line A, identified as SC01, with a maximum throughput rate of 250 boards per hour.
- (f) One (1) natural gas fired humidifier, constructed in 1989, with a maximum heat input rate of 0.7 MMBtu/hr.
- (g) One (1) natural gas fired water heater, constructed in 1989, with a maximum heat input rate of 0.5 MMBtu/hr.
- (h) Two (2) electric cure ovens with Line A, identified as HE02 and HE01, and exhausting through stacks #55 and #57, respectively.
- (i) Two (2) electric reflow ovens with Line A, identified as HE10 and HE07, and exhausting through stacks #18 and #49, respectively.
- (j) One (1) electric reflow oven with Line G, identified as HE06, and exhausting through stack #46, respectively.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

This permit to construct and operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

-
- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
 - (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
 - (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC13-17-3-2] [IC13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of

receipt of a billing.

- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Compliance Requirements [326 IAC 2-1.1-11]

C.5 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.6 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.7 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.8 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.9 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required

by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) Unless otherwise specified in this permit, any reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

- (a) Seven (7) wave solder machines, including the following:
 - (1) One (1) wave solder machines with Line A, identified as ES03, constructed in 1999, with a maximum throughput rate of 250 boards per hour, and exhausting through stacks #12.
 - (2) One (1) wave solder machines with Line B, identified as ES02, constructed in 1998, with a maximum throughput rate of 250 boards per hour, and exhausting through stacks #51.
 - (3) One (1) wave solder machine with Line C, identified as ES05, constructed in 2002, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #14.
 - (4) One (1) wave solder machine with Line D, identified as ES01, constructed in 2003, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #15.
 - (5) One (1) wave solder machine with Line E, identified as ES04, constructed in 2001, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #16.
 - (6) One (1) wave solder machine with Line F, identified as HS03, constructed in 1995, with a maximum throughput rate of 325 boards per hour, and exhausting through stack #36.
 - (7) One (1) wave solder machine with Line G, identified as HS05, constructed in 1999, with a maximum throughput rate of 325 boards per hour, and exhausting through stack #4.
- (b) Fifteen (15) coating operations, including the following:
 - (1) Two (2) conformal coaters with Line A, identified as NS10 and PS02, constructed in 1999 and 2003, with a total maximum throughput rate of 250 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE04), controlled by dry filters, and exhausting through stack #48.
 - (2) Two (2) conformal coaters with Line B, identified as NS08 and PS01, constructed in 1999 and 2003, with a total maximum throughput rate of 250 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE03), controlled by dry filters, and exhausting through stack #52.
 - (3) Two (2) conformal coaters with Line C, identified as NS05 and NS06, both constructed in 1999, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE08), controlled by dry filters, and exhausting through stack #56.
 - (4) Two (2) conformal coaters with Line D, identified as NS01 and NS02, both constructed in 1995, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE05), controlled by dry filters, and exhausting through stack #20.

Facility Description [326 IAC 2-6.1]: (Continued)

- (5) Two (2) conformal coaters with Line E, identified as NS03 and NS04, constructed in 1995 and 1998, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE09), controlled by dry filters, and exhausting through stack #53.
- (6) Two(2) conformal coaters with Line F, identified as NS07 and NS09, both constructed in 1999, with a total maximum throughput rate of 325 boards per hour, using airless spray equipment, equipped with an electric cure oven (NO03), controlled by dry filters, and exhausting through stack #47.
- (7) Two (2) adhesive dispense operations with Line A, identified as FU02 and FU33, both constructed after 1989.
- (8) One (1) RTV applicator with Line A, identified as PS03, constructed in 2003.
- (c) Seven (7) printing operations, constructed after 1995, including the following:
 - (1) One (1) ink jet printing operation with Line A, identified as BM08, with a maximum throughput rate of 325 boards per hour.
 - (2) Two (2) screen printing operations with Line A, identified as DE02 and DE03, with a total maximum throughput rate of 325 boards per hour.
 - (3) One (1) ink jet printing operation with Line D, identified as BM06, with a maximum throughput rate of 450 boards per hour.
 - (4) One (1) ink jet printing operation with Line E, identified as BM05, with a maximum throughput rate of 325 boards per hour.
 - (5) One (1) ink jet printing operation with Line F, identified as BM03, with a maximum throughput rate of 325 boards per hour.
 - (6) One (1) screen printing operation with Line F, identified as DE01, with a maximum throughput rate of 325 boards per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

D.1.1 VOC Emissions [326 IAC 2-7]

The total potential to emit VOC of the wave soldering machines, coating operations, printing operations, and the associate clean-up operations are less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70 Permit) are not applicable to this source. Any change or modification which may increase the VOC usage for these operations to greater than 100 tons per year must be approved by IDEM, OAQ before any such change may occur.

D.1.2 VOC Emissions [326 IAC 8-1-6]

Each of the wave solder machine has potential VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to these solder machines. Any change or modification which may increase the VOC usage for any of the wave solder machine, including the clean-up solvent usage, to greater than 25 tons per year must be approved by IDEM,

OAQ before any such change may occur.

D.1.3 VOC Emissions [326 IAC 8-2-9]

Each of the coating operations has actual VOC emissions less than 15 pounds per day. Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operation) are not applicable to these coating operations. Any change or modification which may increase the VOC usage for any of the coating operations, including the clean-up solvent usage, to greater than 15 pounds per day must be approved by IDEM, OAQ before any such change may occur.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 VOC Emissions

Compliance with the VOC usage limitations contained in Conditions D.1.1, D.1.2, and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.5 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2, and D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the VOC usage limits in Conditions D.1.1, D.1.2, and D.1.3.
 - (1) The VOC content of each solder flux, coating, ink, and solvent used.
 - (2) The amount of solder flux and ink used on a monthly basis, and the amount of coating and solvent used on a daily basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) The daily VOC usage for each coating operation.
 - (4) The total monthly VOC usage for each solder machine and for the entire source.
 - (5) The weight of VOCs emitted for each year.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

- (d) Two (2) natural gas fired boilers, constructed in 1989, each with a maximum heat input rate of 2.4 MMBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (a)(Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from each of the 2.4 MMBtu/hr boiler shall be limited to 0.6 pounds per MMBtu heat input.

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

- (e) Operations using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs:
 - (1) One (1) stencil cleaner with Line A, identified as SC01, with a maximum throughput rate of 250 boards per hour.
- (f) One (1) natural gas fired humidifier, constructed in 1989, with a maximum heat input rate of 0.7 MMBtu/hr.
- (g) One (1) natural gas fired water heater, constructed in 1989, with a maximum heat input rate of 0.5 MMBtu/hr.
- (h) Two (2) electric cure ovens with Line A, identified as HE02 and HE01, and exhausting through stacks #55 and #57, respectively.
- (i) Two (2) electric reflow ovens with Line A, identified as HE10 and HE07, and exhausting through stacks #18 and #49, respectively.
- (j) One (1) electric reflow oven with Line G, identified as HE06, and exhausting through stack #46, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

There are no specifically applicable requirements that apply to these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under
326 IAC 2-6.1-5(a)(5).

Company Name:	United Technologies Electronic Controls, Inc.
Address:	3650 West 200 North
City:	Huntington, Indiana 46750
Phone #:	(260) 358-0888
MSOP #:	069-16982-00030

I hereby certify that United Technologies Electronic Controls, Inc. is

☒ still in operation.
☐ no longer in operation.

I hereby certify that United Technologies Electronic Controls, Inc. is

☒ in compliance with the
requirements of MSOP 069-
16982-00030
☐ not in compliance with the
requirements of MSOP 069-
16982-00030

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative
description of how the source did or will achieve compliance and the date compliance was, or will be
achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

PAGE 1 OF 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Issued March 17, 2004

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the Technical Support Document
for a Minor Source Operating Permit (MSOP)**

Source Background and Description

Source Name: United Technologies Electronic Controls, Inc.
Source Location: 3650 West 200 North, Huntington, Indiana 46750
County: Huntington
SIC Code: 3822
Operation Permit No.: 069-16982-00030
Permit Reviewer: ERG/YC

On January 20, 2004, the Office of Air Quality (OAQ) had a notice published in the Herald Press, Huntington, Indiana, stating that United Technologies Electronic Controls, Inc. had applied for a Minor Source Operating Permit (MSOP) to operate an electric circuit board manufacturing plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 28, 2004, United Technologies Electronic Controls, Inc. submitted comments on the proposed Minor Source Operating Permit. The summary of the comments is as follows:

1. The source requested an approval for the physical changes to the layout of the existing Line A, in order to provide more efficient operation from a manpower perspective. The changes include the following:
 - (a) Relocating the existing units in Line A to form four (4) sub-lines;
 - (b) Adding a new electric cure oven, identified as HE01, which exhausts through stack #57;
 - (c) Changing the unit ID for the existing electric cure oven from HE10 to HE08.

The source stated that these changes will not increase the production rate of the existing Line A and will not affect the maximum throughput rate for each individual unit in Line A. The additional electric cure oven will not increase the potential to emit from the existing Line A because the potential to emit was calculated based on the assumption that all the VOC was emitted from the solder machines, the printing operations, and the coating operations at this source. Therefore, there are no specifically applicable requirements for the electric cure ovens.

For clarification purposes, IDEM, OAQ has made the following changes to Conditions A.2 and D.3 to include the electric cure ovens and reflow ovens which are not directly associated with specific solder machines, printing operations, or coating operations at this source.

A.2 Emission Units and Pollution Control Equipment

- ...
- (h) Two (2) electric cure ovens with Line A, identified as HE02 and HE01, and exhausting through stacks #55 and #57, respectively.**

- (i) Two (2) electric reflow ovens with Line A, identified as HE10 and HE07, and exhausting through stacks #18 and #49, respectively.
- (j) One (1) electric reflow oven with Line G, identified as HE06, and exhausting through stack #46, respectively.

Section D.3

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

...

- (h) Two (2) electric cure ovens with Line A, identified as HE02 and HE01, and exhausting through stacks #55 and #57, respectively.
- (i) Two (2) electric reflow ovens with Line A, identified as HE10 and HE07, and exhausting through stacks #18 and #49, respectively.
- (j) One (1) electric reflow oven with Line G, identified as HE06, and exhausting through stack #46, respectively.

Upon further review, IDEM, OAQ made the following changes to the permit. Text with a line through it has been deleted and bold text has been added. The Table of Contents was updated as necessary.

For clarification, an additional rule citation has been added to Condition B.9.

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]**[IC 13-17-3-2]** [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

...

issued March 17, 2004

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name:	United Technologies Electronic Controls, Inc.
Source Location:	3650 West 200 North, Huntington, Indiana 46750
County:	Huntington
SIC Code:	3822
Operation Permit No.:	069-16982-00030
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from United Technologies Electronic Controls, Inc., relating to the operation of an electric circuit board manufacturing plant

Permitted Emission Units and Pollution Control Equipment

- (a) Seven (7) wave solder machines, including the following:
- *(1) One (1) wave solder machines with Line A, identified as ES03, constructed in 1999, with a maximum throughput rate of 250 boards per hour, and exhausting through stacks #12.
 - (2) One (1) wave solder machines with Line B, identified as ES02, constructed in 1998, with a maximum throughput rate of 250 boards per hour, and exhausting through stacks #51.
 - *(3) One (1) wave solder machine with Line C, identified as ES05, constructed in 2002, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #14.
 - *(4) One (1) wave solder machine with Line D, identified as ES01, constructed in 2003, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #15.
 - *(5) One (1) wave solder machine with Line E, identified as ES04, constructed in 2001, with a maximum throughput rate of 450 boards per hour, and exhausting through stack #16.
 - (6) One (1) wave solder machine with Line F, identified as HS03, constructed in 1995, with a maximum throughput rate of 325 boards per hour, and exhausting through stack #36.

- * (7) One (1) wave solder machine with Line G, identified as HS05, constructed in 1999, with a maximum throughput rate of 325 boards per hour, and exhausting through stack #4.
- (b) Fifteen (15) coating operations, including the following:
 - * (1) Two (2) conformal coaters with Line A, identified as NS10 and PS02, constructed in 1999 and 2003, with a total maximum throughput rate of 250 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE04), controlled by dry filters, and exhausting through stack #48.
 - * (2) Two (2) conformal coaters with Line B, identified as NS08 and PS01, constructed in 1999 and 2003, with a total maximum throughput rate of 250 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE03), controlled by dry filters, and exhausting through stack #56.
 - * (3) Two (2) conformal coaters with Line C, identified as NS05 and NS06, both constructed in 1999, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE08), controlled by dry filters, and exhausting through stack #52.
 - (4) Two (2) conformal coaters with Line D, identified as NS01 and NS02, both constructed in 1995, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE05), controlled by dry filters, and exhausting through stack #20.
 - (5) Two (2) conformal coaters with Line E, identified as NS03 and NS04, constructed in 1995 and 1998, with a total maximum throughput rate of 450 boards per hour, using airless spray equipment, equipped with an electric cure oven (HE09), controlled by dry filters, and exhausting through stack #53.
 - * (6) Two (2) conformal coaters with Line F, identified as NS07 and NS09, both constructed in 1999, with a total maximum throughput rate of 325 boards per hour, using airless spray equipment, equipped with an electric cure oven (NO03), controlled by dry filters, and exhausting through stack #47.
 - * (7) Two (2) adhesive dispense operations with Line A, identified as FU02 and FU33, both constructed after 1989.
 - * (8) One (1) RTV applicator with Line A, identified as PS03, constructed in 2003.
- * (c) Seven (7) printing operations, constructed after 1995, including the following:
 - (1) One (1) ink jet printing operation with Line A, identified as BM08, with a maximum throughput rate of 325 boards per hour.
 - (2) Two (2) screen printing operations with Line A, identified as DE02 and DE03, with a total maximum throughput rate of 325 boards per hour.
 - (3) One (1) ink jet printing operation with Line D, identified as BM06, with a maximum throughput rate of 450 boards per hour.
 - (4) One (1) ink jet printing operation with Line E, identified as BM05, with a maximum throughput rate of 325 boards per hour.

- (5) One (1) ink jet printing operation with Line F, identified as BM03, with a maximum throughput rate of 325 boards per hour.
 - (6) One (1) screen printing operation with Line F, identified as DE01, with a maximum throughput rate of 325 boards per hour.
 - (d) Two (2) natural gas fired boilers, constructed in 1989, each with a maximum heat input rate of 2.4 MMBtu/hr.
 - *(e) Operations using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs:
 - (1) One (1) stencil cleaner with Line A, identified as SC01, with a maximum throughput rate of 250 boards per hour.
 - *(f) One (1) natural gas fired humidifier, constructed in 1989, with a maximum heat input rate of 0.7 MMBtu/hr.
 - (g) One (1) natural gas fired water heater, constructed in 1989, with a maximum heat input rate of 0.5 MMBtu/hr.
- *Note: These units were not permitted before. However, the potential to emit of each unit is less than the exemption thresholds in 326 IAC 2-1.1-3(e)(1). Therefore, these units were not required to have an air approval when they were constructed.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new construction activities included in this permit.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 069-6030-00030, issued on December 23, 1997; and
- (b) CP 069-2937-00030, issued on January 18, 1995.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

- (a) IDEM is aware that the source has operated prior to receipt of the proper permit and did not apply for a MSOP by November 25, 1999. All units at the source are individually exempt. However, the source as a whole is at MSOP levels.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 27, 2003, with additional information received on September 15, 2003, September 17, 2003, October 6, 2003, October 9, 2003, and November 12, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 4).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	4.72
PM10	4.72
SO ₂	0.02
VOC	63.2
CO	2.21
NO _x	2.63

HAPs	Potential To Emit (tons/year)
Toluene	0.09
MEK	1.17
Total	1.26

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year, therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is greater than 25 tons per year, therefore, the source is subject to the provisions of 326 IAC 2-6.1.
- (d) Fugitive Emissions
Since this type of operation is not in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Huntington County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2, since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	4.72
PM10	4.72
SO ₂	0.02
VOC	63.2
CO	2.21
NO _x	2.63

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions are based on the potential to emit of this source.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The boilers at this source have a maximum heat input less than 10 MMBtu/hr. Therefore, the New Source Performance Standards for Small Industrial - Commercial - Institutional Steam generating Units (40 CFR 60.40c-48c, Subpart Dc) are not applicable.
- (c) The source does not perform surface coating operations to metal furniture. Therefore, the New Source Performance Standards for Surface Coating of Metal Furniture (40 CFR Part 60.310 - 60.316, Subpart EE) are not applicable.
- (d) This source does not have any rotogravure printing line. Therefore, the New Source Performance Standards for Publication Rotogravure Printing (40 CFR 60.430-60.453, Subpart QQ) are not applicable.
- (e) This source does not apply the surface coating to any business machines. Therefore, the New Source Performance Standards for Surface Coating of Plastic Parts for Business Machines (40 CFR Part 60.720 - 60.726, Subpart TTT) are not applicable.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.
- (g) This source does not perform any of the following operations: publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Printing and Publishing Industry (40 CFR 63.820 - 63.839, Subpart KK) are not applicable.
- (h) This source is not a HAP major source. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Miscellaneous Metal Parts and Products Surface Coating (40 CFR 63, Subpart MMMM) are not applicable.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 1989 and modified in 1995, 1998, 1999 and 2003. The source is not in 1 of 28 source categories defined in 326 IAC 2-2-1(p)(1) and has the potential to emit of any regulated pollutant before control less than two hundred and fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)

The potential to emit HAP of the entire source is less than the major source thresholds. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 2-7 (Part 70 Program)

The major pollutant from this source is VOC and the potential to emit VOC from the entire source is less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 are not applicable. Any change or modification which may increase the VOC usage from the entire source to greater than 100 tons per year must be approved by the Office of Air Quality before any such change may occur.

326 IAC 2-6 (Emission Reporting)

This source is located in Huntington County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Wave Solder Machines

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The wave solder machines at this source were constructed after January 1, 1980 and each of them has potential VOC emissions less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to the solder machines at this source. Any change or modification which may increase the potential VOC usage, including the VOC usage for clean-up solvents, from any of the solder machines to greater than twenty-five (25) tons per year must be approved by the Office of Air Quality before any such change may occur.

State Rule Applicability - Coating and Printing Operations

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

This source is under the Standard Industrial Classification Code of major group #38. However, each of the coating operations at this source does not have actual VOC emissions greater than 15 lbs/day. Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are not applicable to the coating operations at this source. Any change or modification which may increase the VOC usage for any of the coating operations, including the clean-up solvent usage, to greater than 15 pounds per day must be approved by IDEM, OAQ before any such change may occur.

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The coating and printing at this were constructed after January 1, 1980 and the potential VOC emissions from each of these operations are less than 25 tons per year. Also, the coating and printing operations would be subject to 326 IAC 8-2-9 if the actual VOC emissions were greater. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The maximum coating usage for each conformal coater at this source is less than 5 gallons/day. Therefore, the coating operations at this source are exempt from the requirements of 326 IAC 6-3, pursuant to 326 IAC 6-3-1(a)(15).

State Rule Applicability - Boilers

326 IAC 6-2-4 (PM Emissions for Sources of Indirect Heating)

The two (2) 2.4 MMBtu/hr boilers at this source were constructed in 1989. Pursuant to 326 IAC 6-2-4(a), indirect heating facilities constructed after September 12, 1983, shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = emission rate limit (lbs/MMBtu)
 Q = total source heat input capacity (MMBtu/hr)

Therefore, the emission rate limit calculated from the equation above equals:

$$Pt = \frac{1.09}{(2.4 + 2.4)^{0.26}} = 0.72 \text{ lbs/MMBtu}$$

However, 326 IAC 6-2-4(a) also states that if Q is less than 10 MMBtu/hr, Pt shall not exceed 0.6. Therefore, the PM emission limit for each boiler is 0.6 lbs/MMBtu.

Conclusion

The operation of this electric circuit board manufacturing plant shall be subject to the conditions of the attached Minor Source Operating Permit 069-16982-00030.

Appendix A: Emission Calculations
VOC Emissions
From Wave Solder Machines

Company Name: Untied Technologies Electronic Controls, Inc.

Address: 3650 West 200 North, Huntington, IN 46750

MSOP: 069-16982-00030

Reviewer: ERG/YC

Date: November 12, 2003

VOC emissions from solder wax flux usage:

Unit	Density (Lb/Gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)
ES03	6.74	95.00%	0.0%	95.0%	250	0.001146	6.40	1.83	44.03	8.03
ES02	6.74	95.00%	0.0%	95.0%	250	0.001146	6.40	1.83	44.03	8.03
ES05	6.74	95.00%	0.0%	95.0%	450	0.000330	6.40	0.95	22.82	4.16
ES01	6.74	95.00%	0.0%	95.0%	450	0.000330	6.40	0.95	22.82	4.16
ES04	6.74	95.00%	0.0%	95.0%	450	0.000330	6.40	0.95	22.82	4.16
HS03	6.74	95.00%	0.0%	95.0%	325	0.000913	6.40	1.90	45.60	8.32
HS05	6.74	95.00%	0.0%	95.0%	325	0.000913	6.40	1.90	45.60	8.32
Total								10.3		45.2

* The solder machines are similar to flow coaters and the particulate emissions from these units are negligible.

METHODOLOGY

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

PTE of VOC (lbs/hr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit)

PTE of VOC (lbs/day) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (24 hr/day)

PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (8760 hr/yr) * (1 ton/2000 lbs)

Appendix A: Emission Calculations
VOC Emissions
From the Coating and Printing Operations

Company Name: Untied Technologies Electronic Controls, Inc.

Address: 3650 West 200 North, Huntington, IN 46750

MSOP: 069-16982-00030

Reviewer: ERG/YC

Date: November 12, 2003

Material	Density (Lb/Gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	PTE of PM/PM10 (lb/hr)	PTE of PM/PM10 (ton/yr)	*Transfer Efficiency
Comfomal Coating	8.09	72.12%	68.0%	4.12%	2500	0.0004579	0.33	0.38	9.16	1.67	1.03	4.52	60%
Ink Jek Printing	7.17	83.70%	0.0%	83.70%	2500	0.0000022	6.00	0.03	0.79	0.14	0.00	0.00	100%
Kester Solder Paste	60.00	0.14%	0.0%	0.14%	2500	0.0000046	0.08	0.00	0.02	0.00	0.00	0.00	100%
RTV 3145 Adhesive	9.34	5.00%	5.0%	0.00%	2500	0.0000187	0.00	0.00	0.00	0.00	0.00	0.00	100%
Loctite Adhesive	8.76	91.87%	0.0%	91.87%	2500	0.0000008	8.05	0.02	0.39	0.07	0.00	0.00	100%
Varnish	10.01	28.50%	0.0%	28.50%	2500	0.0000006	2.85	0.00	0.10	0.02	0.00	0.00	100%
Total								0.44		1.91	1.03	4.52	

* The transfer efficiencies were provided by the source. Assume PM10 emissions are equal to PM emissions.

METHODOLOGY

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

PTE of VOC (lbs/hr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit)

PTE of VOC (lbs/day) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (24 hr/day)

PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (8760 hr/yr) * (1 ton/2000 lbs)

PTE of PM/PM10 (lbs/hr) = Max. Throughput (unit/hr) * Max. Usage (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)

PTE of PM/PM10 (tons/yr) = Max. Throughput (unit/hr) * Max. Usage (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Appendix A: Emission Calculations
VOC and HAP Emissions
From the Clean-Up Operations

Company Name: Untied Technologies Electronic Controls, Inc.

Address: 3650 West 200 North, Huntington, IN 46750

MSOP: 069-16982-00030

Reviewer: ERG/YC

Date: November 12, 2003

Material	Density (Lb/Gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of coating	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)
Isopropyl Alcohol	6.51	100.00%	0.0%	100.00%	2500	0.0001843	6.51	3.00	72.0	13.1
OS-120	6.42	100.00%	88.4%	11.60%	2500	0.0000134	0.74	0.02	0.60	0.11
*Toluene	7.26	100.00%	0.0%	100.00%	2500	0.0000011	7.26	0.02	0.48	0.09
*MEK	6.76	100.00%	0.0%	100.00%	2500	0.0000158	6.76	0.27	6.41	1.17
Vigon SC-202 Cleaner	8.26	100.00%	15.5%	84.52%	2500	0.0000175	6.98	0.31	7.33	1.34
1250 Ink Thinner	7.41	100.00%	0.0%	100.00%	2500	0.0000006	7.41	0.01	0.27	0.05
Total								3.63		15.9

* This is also a HAP.

Total HAP Emissions =

1.26
tons/yr

METHODOLOGY

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

PTE of VOC (lbs/hr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit)

PTE of VOC (lbs/day) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (24 hr/day)

PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Max. Throughput (unit/hr) * Max. Usage (gal/unit) * (8760 hr/yr) * (1 ton/2000 lbs)

**Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)**

From Two (2) 2.4 MMBtu/hr Boilers, One (1) 0.7 MMBtu/hr Humidifier, and One (1) 0.5 MMBtu/hr Water Heater

Company Name: Untied Technologies Electronic Controls, Inc.

Address: 3650 West 200 North, Huntington, IN 46750

MSOP: 069-16982-00030

Reviewer: ERG/YC

Date: November 12, 2003

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

6.0

52.6

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO ₂	**NO _x	VOC	CO
	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	0.20	0.20	0.02	2.63	0.14	2.21

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton